



AI Engineer for Agent Development

Design and implement sophisticated AI agents that directly drive banker productivity. You will build multi-agent workflows using AWS Bedrock and Agent Core, engineer tool-use and memory systems, and ensure agents produce reliable, accurate outputs on financial data.

This is a hands-on engineering role requiring deep LLM expertise combined with strong software engineering fundamentals. The agents you build will be used daily by bankers across coverage, credit, and product teams to compress hours of analytical work into minutes.

The Platform Context

This role sits within the bank's enterprise AI Agentic Platform — a strategic initiative to enhance banker productivity using large language models orchestrated via AWS Bedrock and AWS Agent Core, with data served from Databricks.

The platform ingests internal banking data (credit, CRM, trade, GL) alongside external sources such as LSEG, enabling AI agents to draft documents, analyse deals, synthesise research, and surface insights on demand. Security, auditability, and regulatory compliance are non-negotiable.

Key Responsibilities

You will design and implement AI agents using AWS Bedrock Agent Core, including tool definitions, action groups, and knowledge base integrations for banking workflow.

Continuously evaluate new foundational models available via Bedrock (Claude, Titan, Llama, Mistral, etc.) and assess their suitability for specific banking use cases.

Furthermore, you will;

- Engineer memory systems and retrieval-augmented generation (RAG) pipelines connecting agents to internal Databricks data and external sources such as LSEG and Bloomberg
- Build multi-agent orchestration patterns — routing, delegation, parallelisation, and result aggregation across specialised agents
- Develop prompt engineering strategies, system prompts, and evaluation frameworks to ensure consistent, hallucination-resistant agent outputs
- Implement agent memory systems appropriate for banking workflows: short-term session memory and long-term persistent memory across engagements
- Write production-grade Python/C# code with full test coverage, structured logging, observability hooks, and robust error handling
- Collaborate with Domain SMEs to translate banker workflows into precise agent task decompositions and evaluation rubrics
- Build and maintain agent evaluation frameworks to identify regressions in quality, latency, and cost as models and prompts change

What you bring

- 5+ years software engineering, 2+ years focused on LLM/AI systems
- Hands-on AWS Bedrock and at least one orchestration framework (LangChain, LangGraph, or similar)
- Production Python/C# experience building and shipping AI systems
- Strong understanding of memory and RAG architectures, vector databases, and embedding models
- Experience with tool-use / function-calling patterns in LLM applications
- Familiarity with LLM evaluation frameworks (relevance, faithfulness, hallucination detection)

Nice to Have

- Hands-on AWS Agent Core experience specifically
- Financial services background: banking workflows, credit analysis, or capital markets
- Fine-tuning or RLHF experience on domain-specific models
- Familiarity with LSEG, Bloomberg, or financial data APIs as an integrator

What We Offer

- Opportunity to build one of the most innovative AI platforms in the banking sector from the ground up
- Direct exposure to senior banking leadership and C-suite stakeholders
- Competitive compensation with performance-linked bonus and long-term incentive plan
- Hybrid working with flexibility — we trust our people to deliver
- Continuous learning budget and access to frontier AI tools and research
- A culture that values craftsmanship, intellectual honesty, and commercial impact

Danske Bank supports a high degree of workplace flexibility. Our team is currently using a hybrid working model, where we work at least 3 days a week in the office.

You will also benefit from a highly attractive benefits package offering health and dental insurance, pension, phone and other benefits. You will also have flexible work hours, with 6 weeks of vacation, and 5 care days to ensure your work-life balance.

Interested?

If you're have any questions, feel free to contact me, Nikodem Binienda on nbin@danskebank.dk, and I will answer your questions!

Danske Bank

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Ansøgningsfrist

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Kontaktperson

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